



Attorney's  
Docket  
Number RPI-022

Declaration, Petition and Power of Attorney For Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**METHODS FOR MODULATING T CELL RESPONSES BY MANIPULATING A  
COMMON CYTOKINE RECEPTOR GAMMA-CHAIN**

the specification of which

(check one)

       is attached hereto.

X was filed on July 1, 1994 as

Application Serial No. 08/270,152

and was amended on \_\_\_\_\_  
(if applicable)

I do not know and do not believe that the subject matter of this application was ever known or used in the United States before my invention thereof or patented or described in any printed publication in any country before my invention thereof or more than one year prior to the date of this application, and that said subject matter has not been patented or made the subject of an issued inventor's certificate in any country foreign to the United States on an application filed by me or my legal representatives or assigns more than twelve months prior to the date of this application; that I acknowledge my duty to disclose information of which I am aware which is material to the examination of this application, that no application for patent or inventor's certificate on the subject matter of this application has been filed by me or my representatives or assigns in any country foreign to the United States, except those identified below, and that I have reviewed and understand the contents of the specification, including the claims as amended by any amendment referred to herein.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

## PRIORITY CLAIM

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

Check one:

no such applications have been filed.

such applications have been filed as follows

### EARLIEST FOREIGN APPLICATION(S), IF ANY FILED WITHIN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION

Country	Application Number	Date of Filing (month,day,year)	Priority Claimed Under 35 USC 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

### ALL FOREIGN APPLICATION(S), IF ANY FILED MORE THAN 12 MONTHS (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION


CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application. As to subject matter of this application which is common to my earlier United States application, if any, described below, I do not believe that the same was ever known or used in the United States before my invention thereof or patented or described in any printed publication in any country before my invention thereof or more than one year prior to said earlier application, or in public use or on sale in the United States more than one year prior to said earlier application, that the said common subject matter has not been patented or made the subject of an inventor's certificate issued before the date of said earlier application in any country foreign to the United States on an application, filed by me or my legal representatives or assigns more than twelve months prior to said application and that no application for patent or inventor's certificate on said subject matter has been filed by me or my representatives or assigns in any country foreign to the United States except those identified herein.

(Application Serial No.)	(Filing Date)	(Status) (patented,pending,aband.)
(Application Serial No.)	(Filing Date)	(Status) (patented,pending,aband.)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

John A. Lahive, Jr.	Reg. No. <u>19,788</u>	Michael I. Falkoff	Reg. No. <u>30,833</u>
W. Hugo Liepmann	Reg. No. <u>20,407</u>	Ann Lamport Hammitt	Reg. No. <u>34,858</u>
James E. Cockfield	Reg. No. <u>19,162</u>	John V. Bianco	Reg. No. <u>36,748</u>
Thomas V. Smurzynski	Reg. No. <u>24,798</u>	Jeremiah Lynch	Reg. No. <u>17,425</u>
Ralph A. Loren	Reg. No. <u>29,325</u>	Amy E. Mandragouras	Reg. No. <u>36,207</u>
Thomas J. Engellenner	Reg. No. <u>28,711</u>	Elizabeth A. Hanley	Reg. No. <u>33,505</u>
William C. Geary III	Reg. No. <u>31,359</u>	Matthew P. Vincent	Reg. No. <u>36,709</u>
David J. Powsner	Reg. No. <u>31,868</u>	Paul Louis Myers	Reg. No. <u>35,965</u>
Giulio A. DeConti, Jr.	Reg. No. <u>31,503</u>	Elizabeth A. Levy	Reg. No. <u>34,375</u>
		Beth E. Arnold	Reg. No. <u>35,430</u>

and to: Mark F. Boshar, Reg. No. 35,456  
Repligen Corporation  
One Kendall Square  
Building 700  
Cambridge, Massachusetts 02139

Julia D. Hart, Reg. No. 33,132  
Dana-Farber Cancer Institute  
44 Binney Street  
Boston, MA 02115

Send Correspondence to:

Amy E. Mandragouras, Lahive & Cockfield, 60 State Street, Boston, MA 02109

Direct Telephone Calls to: (name and telephone number)

Amy E. Mandragouras, (617) 227-7400

Wherefore I petition that letters patent be granted to me for the invention or discovery described and claimed in the attached specification and claims, and hereby subscribe my name to said specification and claims and to the foregoing declaration, power of attorney, and this petition.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

100 Full name of sole or first inventor

Vassiliki A. Boussiatis

Inventor's signature

V A Boussiatis

Date

10/25/94

Residence 33 Pond Ave, Apt #609, Brookline, MA 02146

44 Washington Street, Apt. #403, Brookline, Massachusetts 02146

Citizenship

Greece

Post Office Address (if different)

200 Full name of second inventor, if any

Lee M. Nadler

Inventor's signature

Lee M. Nadler

Date

10/24/94

Residence

36 Cross Hill Road, Newton, Massachusetts 02159

MA

Citizenship

United States of America

Post Office Address (if different)



#4

Applicant or Assignee: Assiliki A. Boussiotis and Lee M. Nadler  
Serial or Patent No.: 08/270,152  
Filed or Issued: July 1, 1994  
Title: METHODS FOR MODULATING T CELL RESPONSES BY MANIPULATING A COMMON CYTOKINE RECEPTOR GAMMA-CHAIN

Attorney's  
Docket No.: RPI-022

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) and 1.27(c)) - SMALL BUSINESS CONCERN**

I hereby declare that I am

the owner of the small business concern identified below:  
 an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF SMALL BUSINESS CONCERN Repligen Corporation  
ADDRESS OF SMALL BUSINESS CONCERN One Kendall Square, Building 700  
Cambridge, MA 02139

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention described in:

the specification filed herewith with title as listed above.  
 the application identified above.  
 the patent identified above.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME Dana-Farber Cancer Institute  
ADDRESS 44 Binney Street, Boston, MA 02115  
 INDIVIDUAL       SMALL BUSINESS CONCERN       NONPROFIT ORGANIZATION

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
 INDIVIDUAL       SMALL BUSINESS CONCERN       NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Don C. Stark

TITLE OF PERSON OTHER THAN OWNER Vice President, Marketing and Corporate Strategy

ADDRESS OF PERSON SIGNING Repligen Corporation, One Kendall Square, Building 700, Cambridge, MA 02139

SIGNATURE Don C. Stark DATE 21 September 1994



50  
Applicant or Patente: Vassiliki A. Boussiotis and Lee M. Nadler  
Serial or Patent No.: 08/270,152  
Filed or Issued: July 1, 1994  
Title: METHODS FOR MODULATING T CELL RESPONSES BY MANIPULATING A COMMON CYTOKINE RECEPTOR GAMMA-CHAIN

Attorney's  
Docket No.: RPI-022

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS  
(37 CFR 1.9(f) and 1.27(d)) - NONPROFIT ORGANIZATION**

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF NONPROFIT ORGANIZATION Dana-Farber Cancer Institute

ADDRESS OF NONPROFIT ORGANIZATION 44 Binney Street, Boston, MA 02115

TYPE OF NONPROFIT ORGANIZATION

UNIVERSITY OR OTHER INSTITUTION OF HIGHER EDUCATION  
 TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 USC 501(a) and 501(c)(3))  
 NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)  
 WOULD QUALIFY AS TAX EXEMPT UNDER INTERNAL REVENUE SERVICE CODE (26 USC 501(a) and 501(c)(3)) IF LOCATED IN THE UNITED STATES OF AMERICA  
 WOULD QUALIFY AS NONPROFIT SCIENTIFIC OR EDUCATIONAL UNDER STATUTE OF STATE OF THE UNITED STATES OF AMERICA IF LOCATED IN THE UNITED STATES OF AMERICA  
(NAME OF STATE \_\_\_\_\_)  
(CITATION OF STATUTE \_\_\_\_\_)

I hereby declare that the nonprofit organization identified above qualifies as a nonprofit organization as defined in 37 CFR 1.9(e) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention entitled

METHODS FOR MODULATING T CELL RESPONSES BY MANIPULATING A COMMON CYTOKINE RECEPTOR GAMMA-CHAIN

by inventor(s) Vassiliki A. Boussiotis and Lee M. Nadler

described in

the specification filed herewith.  
 application serial no. 08/270,152, filed July 1, 1994  
 patent no. \_\_\_\_\_, issued \_\_\_\_\_

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization regarding the above identified invention.

If the rights held by the nonprofit organization are not exclusive, each individual, concern or organization having rights in the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME Repligen Corporation  
ADDRESS One Kendall Square, Building 700, Cambridge, MA 02139  
 INDIVIDUAL       SMALL BUSINESS CONCERN       NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Julia D. Hart  
TITLE IN ORGANIZATION OF PERSON SIGNING Patent Counsel  
ADDRESS OF PERSON SIGNING \_\_\_\_\_

Julia D. Hart  
SIGNATURE

November 1994  
DATE